

ABSTRACTIMPROVED ULTRASOUND PROCESS AND DEVICE FOR COUNTING
INCLUSIONS IN A LIQUID METAL BATH

Process for displaying, measuring the size and counting individual inclusions in suspension in a moving liquid metal (7), using a sensor comprising at least one means (1) of emitting a series of ultrasound beam pulses within the said liquid metal, at least one means (2) of receiving echoes reflected by the said inclusions, and their accessories, characterized in that it comprises a sensor response calibration step, the said step comprising at least one control reflector (10) with known dimensions and stable with time, successive steps for the acquisition and processing of reflected echoes, a display step, for example of the B scan type, and an image analysis step to count and measure the diameter of inclusions.

Figure 1

BEST AVAILABLE COPY